12-GALLON, 100 PSI CARPET EXTRACTOR

By Sandia Products

Please fill out the following information:

Built With Pride in the USA

Model No:_____

Serial No:_____

Distributor Name:_____

Distributor Phone No:_____

Date of Purchase:_____

Sandia PRODUCTS

Your Ultimate Choice in Profitable Cleaning Performance!

15571 Container Lane, Huntington Beach, CA 92649
Phone: 714-901-8400 | Toll Free: 800-983-5834 | Fax: 714-901-8404
info@sandiaplastics.com | www.sandiaplastics.com

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SAFETY, OPERATION AND MAINTENANCE MANUAL WITH PARTS LIST

Please read before use!

100 PSI

REGISTER YOUR MACHINE ONLINE!

Model No. 80-2100
Model No. 80-2100-H with Heat

SNIPER 12-GALLON CARPET EXTRACTOR

Sandia PRODUCTS

Your Ultimate Choice in Profitable Cleaning Performance!

IMPORTANT INFORMATION AND SAFETY INSTRUCTIONS

Register your Machine at www.sandiaplastics.com/registration.aspx
Serial No:_____

- Reliable Power
- Innovative Design
- Safe & Easy to Use
- Powerful Extracting
- Easy Transport
- Patented Features

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Notes:

9.0 80-2100-H Machine Parts List Continued

Drawing No.	Item ID	Item Description	Qty.
61	80-0011-2	90 Degree Street Elbow	1.00
62	10-0907	Strain Relief for Tube Heater	2.00
63	10-0901	175 psi Relief Valve for Heater	1.00
64	80-0010	1/4" Brass Tee	1.00
65	10-0801-I	90 FPT for Extractor Heater	1.00
66	80-0101-M	1/4" Male Check Valve	1.00
67	10-0843	3/8" Black Hose for Extractor	6.00
68	10-0812	100 psi Extractor Pump	1.00
69	0-0356	3/8 MPT x 3/8 Barb 90 Degree	2.00
70	10-0835-B	Pump Bolt 100 psi Extractor	4.00
71	10-0843	3/8" Black Hose for Extractor	6.00
72	10-0868	1/4" Female QD for Extractor	1.00
73	10-0846	1/4" MPT Hex Nipple for Extractor	1.00
74	10-0801-J	90 MPT for Extractor Heater	1.00
75	80-0017	Bulk Head fitting for Extractor	2.00
76	80-0017	Bulk Head fitting for Extractor	2.00
77	10-0843	3/8" Black Hose for Extractor	6.00
78	10-0400-C	Keeper Latch for Extractor	1.00
79	10-0832	S/R Strap Bolts	4.00
80	10-0831	S/R Bracket for Extractor	2.00
81	10-0818	S/R Top of Tank Bolt on Extractor	2.00

Sandia PRODUCTS

Your Ultimate Choice in Profitable Cleaning Performance!

Dear Valued Customer,

Congratulations on the purchase of your 12-Gallon Carpet Extractor! The world of carpet cleaning is becoming more high-tech and competitive and we strive to provide you with the most innovative products. Our carpet extractor is yet another example of this, bringing a new dimension to carpet and upholstery cleaning with its cutting-edge features, quality and value.

Please review this manual, paying careful attention to the Safety Instructions section. Keep in mind that any unnecessary damage, neglect or abuse of this machine will void your warranty. You can be confident that simple maintenance will ensure that your carpet extractor provides quality performance for many years to come.

If warranty questions arise, please consult your manual or contact your distributor. Should you have any questions regarding maintenance, replacing parts or ordering parts, please call an authorized distributor.

Before you begin using your carpet extractor, please thoroughly review the Owner's Manual.

Again, congratulations on the purchase of your 12-Gallon Carpet Extractor!

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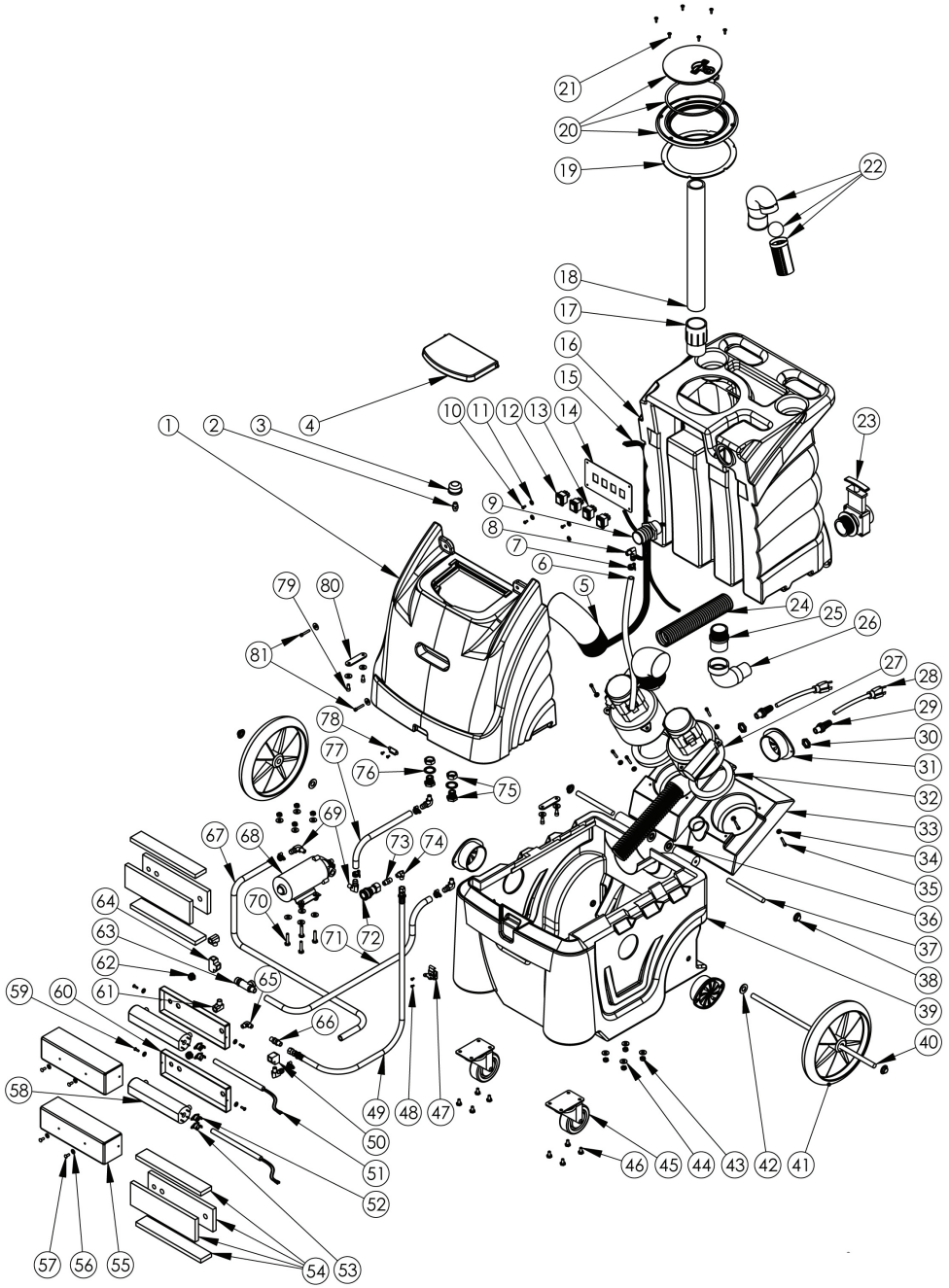
9.0 80-2100-H Machine Parts List

Drawing No.	Item ID	Item Description	Qty.
1	SN-12-ST-GRYGRAN	12-Gallon Solution Tank - Gray Granite	1.00
2	10-0479	1/4" Male Close Nipple	1.00
3	10-0845	1/4" Strainer for Extractor	1.00
4	SN-12-L-GRYGRAN	12-Gallon Lid - Gray Granite	1.00
5	80-0001	Extractor Exhaust Hose	0.30
6	10-0843	3/8" Black Hose for Extractor	6.00
7	10-0826	3/4" Hose Clamp for Extractor	6.00
8	80-0026	3/8 Barb x 1/4 MPT 90 Degree	3.00
9	10-0806	Barb Hose Fitting for Extractor	1.00
10	10-0379	8-32 x 3/8 Screw	8.00
11	10-0204	Motor Mount Back-Up Washer	18.00
12	10-0803	Splash-Proof Switch for Extractor	3.00
13	10-0803-H	Splash-Proof Heater Switch	1.00
14	10-0809-A	Extractor 4-Hole Switch Plate	1.00
15	80-0200	Extractor Harness	1.00
16	SN-12-RT-GRYGRAN	12-Gallon Recovery Tank - Gray Granite	1.00
17	80-0008	1.5 PVC Female Adapter	1.00
18	10-0416-A	1-1/2" Black ABS Stand Pipe	1.30
19	10-0804-A	Hatch Cover Gasket for Extractor	1.00
20	10-0804	Hatch Cover for Extractor	1.00
21	10-0419-A	Screw for Extractor Hatch	12.00
22	80-0012	Shut-Off Assembly for Extractor	1.00
23	10-0805	Dump Valve for Extractor	1.00
24	10-0024	1-1/2" Black Vacuum Hose	1.60
25	10-0849	1-1/2" ABS Fitting	1.00
26	10-0848-B	1-1/2" 90 Degree ABS Street Elbow	3.00
27	10-0811	2-Stage Extractor Motor	2.00
28	10-0838	Pigtail for Extractor	2.00
29	10-0850	Strain Relief for Extractor	2.00
30	10-0851	Strain Relief Nut for Extractor	2.00
31	10-0822	Exhaust Grate for Extractor	3.00
32	10-1030-S2	2-Stage Extractor Motor Gasket	2.00
33	SN-12-MFLD	Extractor Motor Manifold	2.00
34	10-0023	Shoulder and Waist Belt Washer	4.00
35	10-0833	Motor Manifold Bolts for Extractor	10.00
36	10-0830	Hinge Keeper for Extractor	2.00
37	10-0821	Extractor Hinge	2.00
38	10-0820	End Cap for Rod on Extractor	4.00
39	SN-12-MB-BLKGRAN	12-Gallon Motor Base - Black Granite	1.00
40	10-0836	19" Axle for Extractor	1.00
41	10-0807	Wheels for Extractor	2.00
42	10-0840	Nylon Washer	8.00
43	10-0835-N	Nut for Pump Bolt on Extractor	4.00
44	10-0834	Pump Flat Washer	14.00
45	10-0808	Caster for Extractor	2.00
46	10-0816	Caster Bolt	8.00
47	10-0400-D	Latch for Extractor	1.00
48	10-0379	8-32 x 3/8 Screw	8.00
49	80-0040	3000 psi Hose for Extractor	4.50
50	10-0852	1/4" 90 Degree Brass Elbow	2.00
51	10-1500-A	Heater Element 1000 Watt	2.00
52	10-0814	Senor for Extractor Heater	2.00
53	10-0814-B	Manual Sensor for Heater	2.00
54	10-0921	Breakdown of Aluminum Box for Dual Rod Heater	2.00
55	10-0921	Aluminum Box for Dual Rod Heater	2.00
56	10-0204	Motor Mount Back-Up Washer	18.00
57	80-0022-A	Screw for Panel	8.00
58	10-0920	Dual Rod Heat Exchanger Tube	2.00
59	80-0022-A	Screw for Panel	8.00
60	10-0921	Aluminum Box for Dual Rod Heater	2.00

8.0 80-2100-H Machine Schematic Drawing



New Equipment Warranty

5-years on molded body parts, 2-Years on motor and electrical components, 1-year on pump.

Warranty Policy

All equipment is inspected and tested before shipping from the manufacturer. All parts are warranted to be new and free from defects in workmanship and material, under normal use to the original retail purchaser. This warranty limits manufacturer's liability for defects in workmanship or materials for replacement of defective parts only. The manufacturer accepts no liability for incidental or consequential damages arisen from the use of any equipment, defective or not. This warranty is in lieu of all expressed or implied warranties and is extended only to the original retail purchaser. Manufacturer sales and service representatives are not authorized to waive or alter the terms of this warranty, or to increase the obligations of the manufacturer under the warranty. Parts replaced or repaired under this warrant are warranted for the remainder of the original warranty period.

Freight charges and travel charges to and from the service provider shall be covered for ninety (90) days from the purchase date. After the ninety (90) day period, these freight charges shall be paid by the equipment owner, subject to manufacturer discretion. Certain circumstances may require additional consideration. No travel charges shall be covered after ninety (90) days.

The manufacturer covers up to one (1) year (365 days) of service labor at the manufacturer's calculated hourly labor rate/repair time when performed by a manufacturer's authorized service provider. Ultimately, labor reimbursement costs are at the discretion of the manufacturer. After one (1) year, the original retail purchaser is responsible for all labor costs with no manufacturer reimbursement.

The original purchaser must contact the manufacturer to follow correct RMA/warranty procedures. They must have a copy of the RMA Sheet enclosed in the box with the returned item. No returns shall be authorized unless the proper RMA procedures are followed. It is the responsibility of the distributor to repair the customer's equipment as soon as possible. If the distributor does not have the facilities to repair the equipment, it may be shipped or taken to an authorized service center for repair.

The manufacturer charges a 15% restocking fee for any items that are being returned to stock. Items must be new, unused, free of damage and are only good for up to one (1) year. After one (1) year, the manufacturer does not accept the return of any item(s) for a reimbursed price.

Authorized warranty replacement parts need to come directly from the manufacturer. Any use of any other parts will void warranty. Sandia Products does not reimburse for parts used by customer that were not supplied directly for the machine under warranty.

The customer must contact the manufacturer prior to working on or changing out of any parts, etc. The manufacturer must issue an RMA Sheet containing approved labor time and replacement parts. Do not send parts or equipment back to the manufacturer without an RMA Number and approval. No labor will be paid for, nor parts cost paid for or reimbursed, that have not previously been approved by the manufacturer. All warranty work must be approved and authorized to qualify, and appropriate warranty procedures must be followed.

The warranty starts on the purchase date by the original purchaser from an authorized Sandia Products distributor, subject to proof of purchase. The Machine Registration Form must be completed online at the time of purchase. If proof of purchase cannot be identified, the warranty start date is ninety (90) days after the date of sale to an authorized Sandia Products distributor.

Returned Material Authorization (RMA) Procedure

Original purchaser must contact the manufacturer to follow correct RMA/warranty procedures. Must include a copy of RMA Sheet enclosed in the box with returned item. No returns shall be authorized unless the proper RMA procedures are followed. It is the responsibility of the distributor to repair the customer's equipment as soon as possible. If the distributor does not have the facilities to repair the equipment, it may be shipped or taken to an authorized service center for repair.

Customer must contact the manufacturer prior to working on or changing out any parts, etc. Manufacturer must issue an RMA Sheet containing approved labor time and replacement parts. Do not send parts or equipment back to manufacturer without an RMA Number and approval. No labor will be paid for, nor part costs paid for or reimbursed that have not been previously approved by manufacturer. All warranty work must be approved and authorized to qualify and appropriate warranty procedures must be followed.

1.0 Safety Instructions

READ THIS MANUAL BEFORE USING YOUR CARPET EXTRACTOR. KNOW THE PROPER OPERATION, CORRECT APPLICATIONS AND THE LIMITATIONS OF THIS EQUIPMENT **BEFORE** USE.

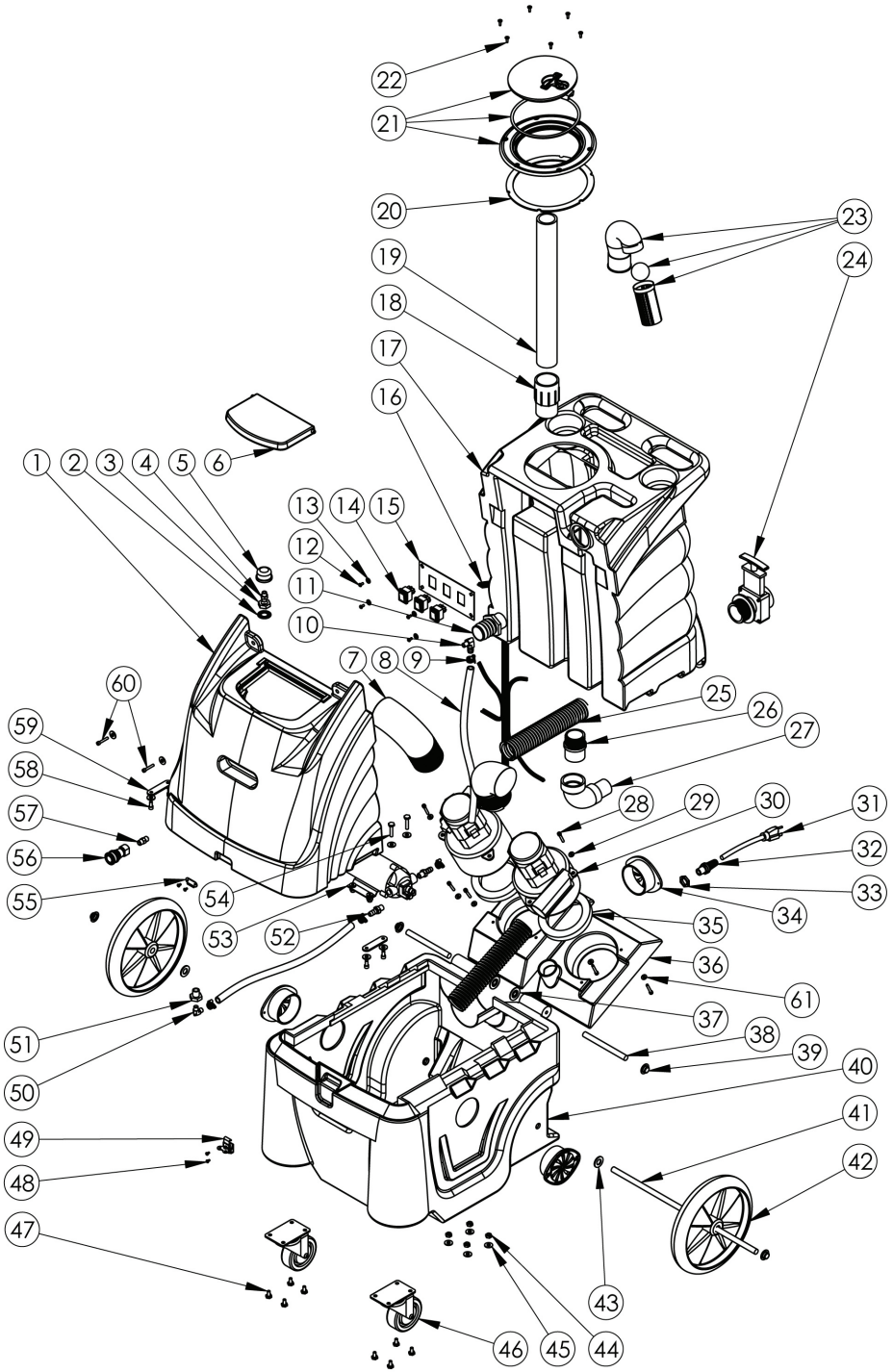
Reduce the Risk of Fire, Electric Shock or Injury:

- Use only as described in this manual. Use only the attachments recommended by the manufacturer.
- Test all outlets with an outlet tester before plugging machine into any outlet. Plug cord into the nearest grounded outlet.
- DO NOT unplug by pulling on the cord, grasp the plug. DO NOT pull unit by the cord.
- Keep cord away from heated surfaces.
- Never attempt adjustments or repairs while the machine is plugged in.
- DO NOT use if cord or plug are damaged.
- DO NOT use outdoors, in standing water on wet surfaces.
- Pay close attention when using machine near children.
- DO NOT pick up flammable or combustible materials or use machine where they may be present.
- DO NOT leave machine outdoors, in extreme heat or cold. Harsh weather elements will damage components and void warranty.
- Lift using only the appropriate handles.
- Always wear the appropriate clothing and safety equipment when operating the machine.
- Keep all body parts, hair and loose clothing away from openings and moving parts.
- Use extra care when cleaning stairs. Never move the machine up or down stairs with fluid in the machine.
- Use common sense to protect yourself and others from injury when using the machine.

7.0 80-2100 Machine Parts List

Drawing No.	Item ID	Item Description	Qty.
1	SN-12-ST-GRYGRAN	12-Gallon Solution Tank - Gray Granite	1.00
2	80-0017	Bulk Head fitting for Extractor	1.00
3	80-0017	Bulk Head fitting for Extractor	1.00
4	10-0479	1/4" Male Close Nipple	1.00
5	10-0845	1/4" Strainer for Extractor	1.00
6	SN-12-L-GRYGRAN	12-Gallon Lid - Gray Granite	1.00
7	80-0001	Extractor Exhaust Hose	0.40
8	10-0843	3/8" Black Hose for Extractor	8.80
9	10-0826	3/4" Hose Clamp for Extractor	4.00
10	80-0026	3/8 Barb x 1/4 MPT 90 Degree	2.00
11	10-0806	Barb Hose Fitting for Extractor	1.00
12	10-0379	8-32 x 3/8 Screw	8.00
13	10-0204	Motor Mount Back-Up Washer	18.00
14	10-0803	Splash-Proof Switch for Extractor	3.00
15	10-0809	Extractor 3-Hole Switch Plate	1.00
16	80-0200	Extractor Harness	1.00
17	SN-12-RT-GRAYGRAN	12-Gallon Recovery Tank - Gray Granite	1.00
18	80-0008	1.5 PVC Female Adapter	1.00
19	10-0416-A	1-1/2" Black ABS Stand Pipe	1.30
20	10-0804-A	Hatch Cover Gasket for Extractor	1.00
21	10-0804	Hatch Cover for Extractor	1.00
22	10-0419-A	Screw for Extractor Hatch	12.00
23	80-0012	Shut-Off Assembly for Extractor	1.00
24	10-0805	Dump Valve for Extractor	1.00
25	10-0024	1-1/2" Black Vacuum Hose	1.30
26	10-0849	1-1/2" ABS Fitting	1.00
27	10-0848-B	1-1/2" 90 Degree ABS Street Elbow	3.00
28	10-0833	Motor Manifold Bolts for Extractor	10.00
29	10-0204	Motor Mount Back-Up Washer	18.00
30	10-0811	2-Stage Extractor Motor	2.00
31	10-0838	Pigtail for Extractor	1.00
32	10-0850	Strain Relief for Extractor	1.00
33	10-0851	Strain Relief Nut for Extractor	1.00
34	10-0822	Exhaust Grate for Extractor	3.00
35	10-1030-S2	2-Stage Extractor Motor Gasket	2.00
36	SN-12-MFLD	Extractor Motor Manifold	2.00
37	10-0830	Hinge Keeper for Extractor	2.00
38	10-0821	Extractor Hinge	2.00
39	10-0820	End Cap for Rod on Extractor	4.00
40	SN-12-MB-BLKGRAN	12-Gallon Motor Base - Black Granite	1.00
41	10-0836	19" Axle for Extractor	1.00
42	10-0807	Wheels for Extractor	2.00
43	10-0840	Nylon Washer for Extractor Axle	8.00
44	10-0835-N	Nut for Pump Bolt on Extractor	4.00
45	10-0834	Pump Flat Washer	10.00
46	10-0808	Caster for Extractor	2.00
47	10-0816	Caster Bolt	8.00
48	10-0379	8-32 x 3/8 Screw	8.00
49	10-0400-D	Latch for Extractor	1.00
50	80-0026	3/8 Barb x 1/4 MPT 90 Degree	2.00
51	80-0017	Bulk Head fitting for Extractor	1.00
52	10-0823	3/8" Barb x 3/8" Male for Extractor	2.00
53	10-0812	100 psi Extractor Pump	1.00
54	10-0835-B	Pump Bolt 100 psi Extractor	4.00
55	10-0400-C	Keeper Latch for Extractor	1.00
56	10-0868	1/4" Female QD for Extractor	1.00
57	10-0846	1/4" MPT Hex Nipple for Extractor	1.00
58	10-0832	S/R Strap Bolts	4.00
59	10-0831	S/R Bracket for Extractor	2.00
60	10-0818	S/R Top of Tank Bolt on Extractor	2.00
61	10-0023	Shoulder and Waist Belt Washer	4.00

6.0 80-2100 Machine Schematic Drawing



2.0 Grounding Instructions

DANGER: IMPROPER GROUNDING METHOD CAN RESULT IN A RISK OF ELECTRIC SHOCK.

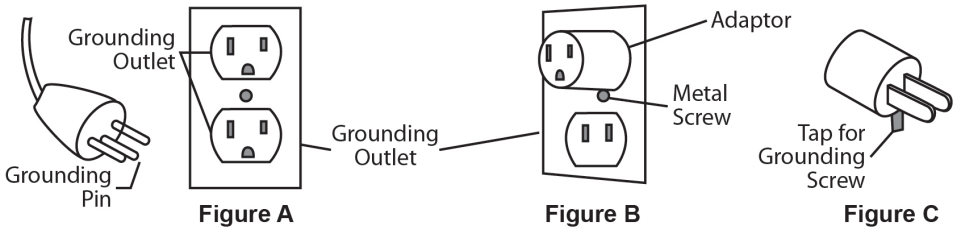
Electrical equipment must be grounded. If the machine should malfunction or breakdown, grounding provides a path of least resistance for electrical current to reduce the risk of electric shock. The Carpet Extractor is equipped with a cord containing a grounding conductor and grounding plug. The plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

If repair or replacement of the cord or plug is necessary, DO NOT connect the grounded wire to a flat bed terminal. The grounding wire is the wire with insulation and an outer green surface, with or without yellow stripes.

Grounding Method

The equipment is for use on a normal 120 Volt circuit. It includes a grounded plug (plug shown in Figure A). A temporary adapter (Figure B and C) may be used to connect this plug into a 2-pole receptacle (Figure B) if a properly grounded outlet is not available.

The temporary adapter should be used only until a properly grounded outlet (Figure A) can be installed by a qualified electrician. The green colored rigid ear lug or the like extending from the adapter must be connected to a permanent ground, such as a properly grounded outlet box cover. Whenever an adapter is used, it must be held in place by a metal screw.



WARNING:

Improper connection of the equipment grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. DO NOT modify the plug provided with the equipment. If the plug will not fit into the outlet, have a proper outlet installed by a qualified electrician.

NOTE: In Canada, the use of a temporary adapter is not permitted by the Canadian Electrical Code.

3.0 Prepare Unit for Use

DO NOT USE ON WET SURFACES. DO NOT EXPOSE TO RAIN. STORE INDOORS.

- All Carpet Extractors, no matter what the time of year, are shipped with antifreeze in the solution lines. Prior to first use, fill the tank with one quart of warm water. Attach the hose and using the hand tool wand, flush out the system by spraying the one quart of water through the pump.
- Attach the 1-1/2 inch vacuum hose and the brass quick disconnect.
- Fill the base unit (the recovery tank must be removed) with warm water (less than 100 degrees Fahrenheit). Fill to approximately 4 inches from the top. Use a liquid detergent made for carpet cleaning or upholstery. Read and mix to the dilution ratios as directed.

Electrical

Plug cord(s) into 20 AMP grounded wall outlet(s). 20 AMP circuits are normally found in kitchens and bathrooms. Never remove ground prong from the plug. If a circuit breaker trips during operation, turn machine off, reset the breaker and move the electrical cord to a different outlet and resume operation.

Vacuum System

The extractor uses a single vacuum motor system that provides outstanding water lift and air flow.

Automatic Vacuum Shut-Off: The float assembly shut-off, located in the recovery tank on the vacuum stand pipe, prevents the waste tank from overflowing into the stand pipe and damaging the vacuum motor. The float assembly will cut-off vacuum to the waste tank. When this happens, immediately turn off the vacuum motor and empty the waste tank.

It is also necessary to use low foaming chemicals or defoamer to eliminate foam buildup in the recovery tank and damage to the vacuum motor. If moisture does enter the vacuum motor, it is necessary to WD-40 the motor. Remove the float assembly from the stand pipe and turn on both vacuum motor. Spray a five second burst of WD-40 into the stand pipe and continue to let the vacuum motor run for three minutes.

4.0 Maintenance

Regular maintenance is required to keep your carpet extractor in proper working condition. Thoroughly clean all equipment and accessories after each use:

- Rinse the solution and recover tanks with clean water.
- Flush the pump system with clean water, including all hoses and wand(s).
- Do not allow water to remain in the tanks after use.
- Lubricate all quick disconnects with WD-40 or similar lubricant.

Storing your Carpet Extractor

You must winterize your carpet extractor to protect the pump system from freezing. Damage due to freezing is not covered under the Warranty. Store your extractor in temperatures over 40 degrees Fahrenheit. Although this is not recommended, if you plan on storing your extractor in freezing conditions, you must prime your extractor with antifreeze.

5.0 Problem Solving

Never operate this carpet extractor when the equipment is not performing as expected or when any part is visibly damaged. When repair is needed, take the equipment to an authorized service center.

System	Problem	Possible Cause	Remedy
Vacuum System	No Vacuum / Weak Vacuum	1. Vacuum Tank Full 2. Float Shut-Off Tank Screen Dirty 3. Float Ball Stuck 4. Damaged or Loose Vacuum Hose 5. Dump Valve Open 6. Access Lid not Sealed 7. Vacuum Hose Clogged 8. Air Intake Grid Clogged 9. Leak in Recovery Tank 10. Water Coming out of Vacuum Exhaust	1. Empty Tank 2. Clean the Screen with Water 3. Tap Float to Unstick then Clean 4. Attach or Replace 5. Close Valve 6. Replace Gasket 7. Clear Debris 8. Clean 9. Clean and Dry Area, Patch with Silicone 10. Use a Low Foaming Detergent
Electrical System	Unit will not Turn On	1. Extension Cord not Plugged In 2. Switch not in the “On” Position 3. Building Circuit Overloaded 4. Wiring Connections Loose	1. Check if Machine and Cord are Plugged In 2. Check Switches, Replace if Necessary 3. Reset Circuit 4. Unplug Machine and Check for Loose Wires
	Burning Smell	1. Vacuum Motor Hung Up 2. Pump Motor Hung Up	1. Replace Vacuum Motor 2. Replace Pump
Pump System	Pump is not Running Properly	1. No Power to the Pump 2. Jets on Wand are Clogged 3. In-Line Water Filter is Clogged 4. Debris in Solution Tank Covering Inlet 5. Kinked or Loose Hose 6. Pump Failed 7. Quick Disconnects are not Completely Locked Together 8. Heater is Clogged with Deposits 9. Pump is Pulsating 10. Auto Prime Valve is Open	1. Check the Electrical System 2. Clean Jet Filters 3. Clean In-Line Filter 4. Clear Debris 5. Check and Replace Hoses if Necessary 6. Replace Pump 7. Snap Quick Disconnects Together\ 8. Flush Heater with System Maintainer or Replace if Necessary 9. Check for Clogged Jets and Clean 10. Close Valve